Unit 2 – Creating Systems to Manage Information
January 2022

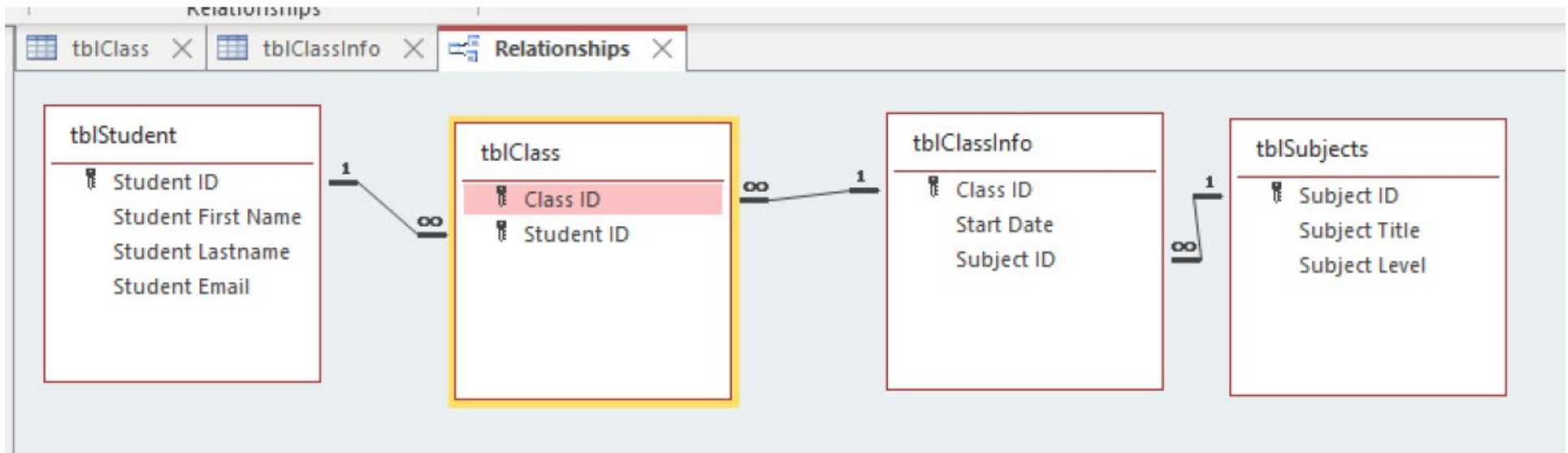## Script A

Activity	Band	Mark	Max Mark
Part A			
1 – Database relationship screenprint	4	8	8
2 – Table structures and validation	4	7	8
3 – Queries and report	4	11	12
4 – Structure testing	3	6	6
5 – Structure evaluation	3	6	6
Part B			
6 – Interface and functionality	4	12	14
7 – Interface testing	3	6	6
8 – Interface evaluation	2	4	6
Total		**60**	**66**

Contents

Activity 1 – Database Relationship Screenprint, Band 4, Marks 8

Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 1: ERD screenprint	**0**	**1-2**	**3-4**	**5-6**	**7-8**	**8**
	rdable material	ERD shows an attempt at normalisation with significant data redundancy. ERD has some correct relationships shown.	ERD shows that most data is correctly normalised with some data redundancy. ERD has some correct relationships and some correct relationship types.	ERD shows that most data is correctly normalised with minimal data redundancy. ERD has mostly correct relationships and mostly correct relationship types shown.	The ERD shows that the data is correctly normalised with no data redundancy. ERD has correct relationships and relationship types shown throughout.	

Trait	Band	Comments
1	4	• All fields are in the correct tables. Correctly normalised with no data redundancy
2	4	• Correct relationships and relationship types throughout
Band	4	**The learner has fully normalised the data set and has provided an accurate solution**
Mark	8	

Activity 2 – Table Structures and Validation, Band 4, Marks 7

Table Structures

Add screenprints of each of your tables in design view showing the table names, field names and data types **ONLY**

Trait 1
- A recognised naming convention has been used throughout
- Field names are consistent

Trait 2
- Learner has identified all primary and foreign keys from their ERD in Activity 1

Trait 3
- Start Date is Date/Time
- Subject Level is number
- The rest of the data types of fine too

Table Validation

Ensure the validation and the field it is applied to can be seen clearly in your screenshots.

Presence Check

- Add a screenprint of **one** presence check

Trait 4
- Student Lastname is the most appropriate field to apply the presence check to i.e. the field the learners were guided to in the scenario/testing requirements
- Validation rule and validation text are suitable

Length Check

- Add a screenprint of *one* length check

Student Email	Short Text

General | Lookup

Field Size	19
Format	

- The length check may be applied to any text field. 19 is a suitable length for the email address

Value Lookup or Range Check

- Add a screenprint of *one* value lookup or *one* range check you have applied

Subject Level	Number

General | Lookup

Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	>=1 And <=3 And Is Not Null
Validation Text	Please Enter a valid level between 1 and 3
Required	No

Trait 4

1. Subject Level is the field the learners were guided to in the scenario and the testing requirements
2. The learner has ensure it is the correct range considering the scenario and the data extract
3. The validation text is useful

Table Lookup

- Add a screenprint of *one* table lookup you have applied (foreign key only)

General	Lookup
Display Control	Combo Box
Row Source Type	Table/Query
Row Source	tblSubjects
Bound Column	1
Column Count	2
Column Heads	No
Column Widths	0.011cm;4cm
List Rows	16
List Width	Auto
Limit To List	Yes
Allow Multiple Values	No
Allow Value List Edits	No
List Items Edit Form	
Show Only Row Source V	No

Trait 4

4. The table lookup should be on any foreign key. In this instance you cannot determine the table or the field from the screenprint, which means full credit cannot be given. The examiner must be able to determine the table and field the lookup is being applied.

Format Check

- Add a screenprint of *one* format check you have applied

Student Email		Short Text

General	Lookup
Field Size	19
Format	
Input Mask	LLL_LL"@washer.ac.uk"
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Text Align	General

Trait 4

5. The email address is the field the learners were guided to in the scenario and testing requirements. The format is not entirely accurate in that forcing to upper/lowercase where required is missing but it is a very good attempt.

Activity 2: Table structure and validation	0	1-2	3-4	5-6	7-8	8
	No rewardable material	Uses some meaningful field and table names with some inconsistencies. The table structure identifies some primary and foreign key fields. The table structure has limited use of correct data types. Limited use of validation which may be inaccurate.	Uses meaningful field and table names with minor inconsistencies. The table structure identifies most primary and foreign key fields. The table structure has correct data types for most fields. Accurate validation rules for some of the fields that require validation.	Uses a recognised naming convention with minor inconsistencies for fields and tables. The table structure identifies all primary and most foreign key fields. The table structure has correct data types for most fields including matching primary and foreign key fields. Accurate validation rules for most of the fields that require validation.	Uses a recognised naming convention consistently for fields and tables. The table structure identifies all primary and foreign key fields. The table structure has correct data types for all fields. Accurate validation rules for all fields that require validation.	

Trait	Band	Comments
1	4	• A recognised naming convention has been used for both tables and fields
2	4	• All primary and foreign keys have been identified (matches their Activity 1)
3	4	• All of the data types are correct
4	3	• The learner has included accurate validation rules for most of the fields that require validation. There was a weakness in terms of the table lookup – could not see the table or field it was applied to, and the format check was not quite accurate.
Band	4	**Overall, there is enough evidence to place the learner in band 4. The weaknesses in terms of the table lookup prevent it from**
Mark	7	**accessing full marks. The slight weaknesses in the table lookup and format check prevent full marks being awarded.**

Activity 3 – Queries and report, Band 4, Marks 11

Queries

(a) Create a query to display an alphabetically sorted list of student names who study GCSE Maths or BTEC Information Technology. The names must be sorted by surname and then firstname. It must show the full name of each student and the subject title only.

Trait 1

Point are awarded for these fields in the query grid

- Subject title (1)
- Student Lastname (1)
- Student First Name (1)

Trait 2

- Student Lastname has been sorted (1)
- Student First name is not sorted after Student Last name
- Subject Title criteria includes GCSE Maths and BTEC Information Technology (1)
- Subject Title criteria uses OR (1)
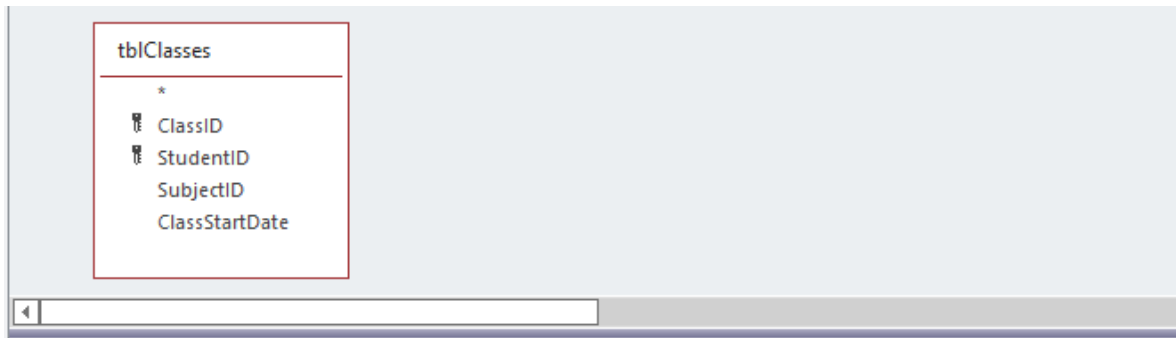
Trait 3 (Datasheet view)

- The ordering of the columns is appropriate i.e. easy to read and understand (1)
- There is no truncation of the field names and no truncation of the data (1)
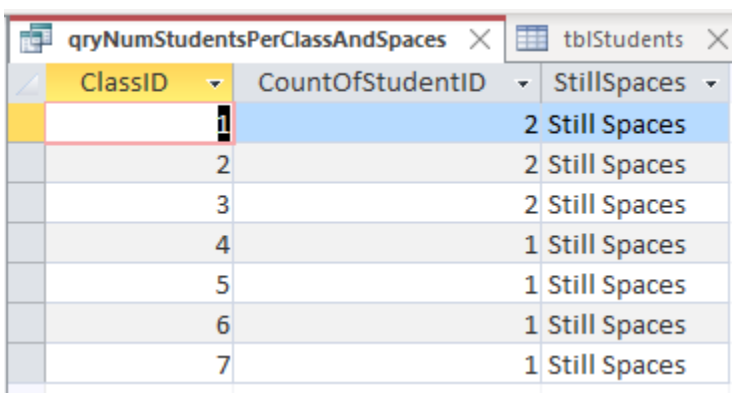- Only the required fields have been displayed (1)

(b) Create a query that will calculate:
- the number of students enrolled into each class.

Display:
- the subject title
- the number of students enrolled into each class
- a field with the automatically generated field content of "Still Spaces" if there are spaces left in a class.

Field:	ClassID	StudentID	StillSpaces: Ilf(Count([StudentID])<20,"Still Spaces","No Spaces")	☑
Table:	tblClasses	tblClasses		
Total:	Group By	Count	Expression	
Sort:				
Show:	☑	☑	☑	
Criteria:				

Trait 1
Point are awarded for these fields in the query grid
6. Subject title (1)
7. Field that could be used in the calculation for the number of students enrolled – StudentID (1)
8. Field that could be used in the if statement/calculation for number of spaces – StudentID (1)

Trait 2
9. If statement used (1)
10. Check to see if there are still spaces (1) (may or may not be a part of the if statement)
11. Message to say there are still spaces (1)
12. If statement fully correct (1)

Trait 3 (Datasheet view)
13. The ordering of the columns is appropriate i.e. easy to read and understand (1)
14. There is no truncation of the field names and no truncation of the data (1)
15. Only the required fields have been displayed (1)

Additional
At least one generated field has been named sensibly – StillSpaces (1)

Report

(c) Create a report that shows a list of classes.

For each class, calculate the total number of students enrolled.

Display:

- a suitable report title
- the class start date
- the subject title
- the names of the students enrolled
- the total number of students enrolled
- the overall number of enrolments in all classes.

The report must fit on one page.

Trait 1
Point are awarded for these fields in the report

16. Class start date (1)
17. Subject title (1)
18. Student first name (1)
19. Student surname (1)
20. Field that could be used in the calculation for the total number of students enrolled in a class – Student First Name (1)
21. Field that could be used in the calculation for the total number of enrolments in all classes – Student First Name (1)

Trait 2
22. Total number of student enrolled per class = Count([Student First Name]) (1)
23. Total number of enrolments in all classes = Count([Student First Name]) (1)
24. Enrolments per class in relevant footer/header and enrolments overall in the report footer/header (1)

Trait 3 (taken from any view of the report)
25. Title is appropriate (1)
26. Labels have spaces and are readable (1)

Class List

GCSE Maths — 06/09/2021

Student First Name	Student Last Name
James	Abbott
Lewis	Bate

Total In Class 2

GCSE Computer Science — 06/09/2021

Student First Name	Student Last Name
James	Abbott
Sophie	Bentham

Total In Class 2

AS Level Computer Science — 07/09/2021

Student First Name	Student Last Name
Rhenshika	Saddiq
Taylor	Scott

Total In Class 2

BTEC Information Technology — 07/09/2021

Student First Name	Student Last Name
Komal	Scott

Total In Class 1

A Level Computer Science — 07/09/2021

Student First Name	Student Last Name
Jack	Smales

Total In Class 1

GCSE Maths — 07/09/2021

Student First Name	Student Last Name
Taylor	Scott

Total In Class 1

Overal Enrolments 9

Note the learner did include a pdf version of the report. It is a screenprint here for illustration purposes only.

Trait 3 continued. Must be taken from PDF of the report only
27. No truncation (1)
28. The report is fit for purpose (1)
29. The report fits on one page (1)
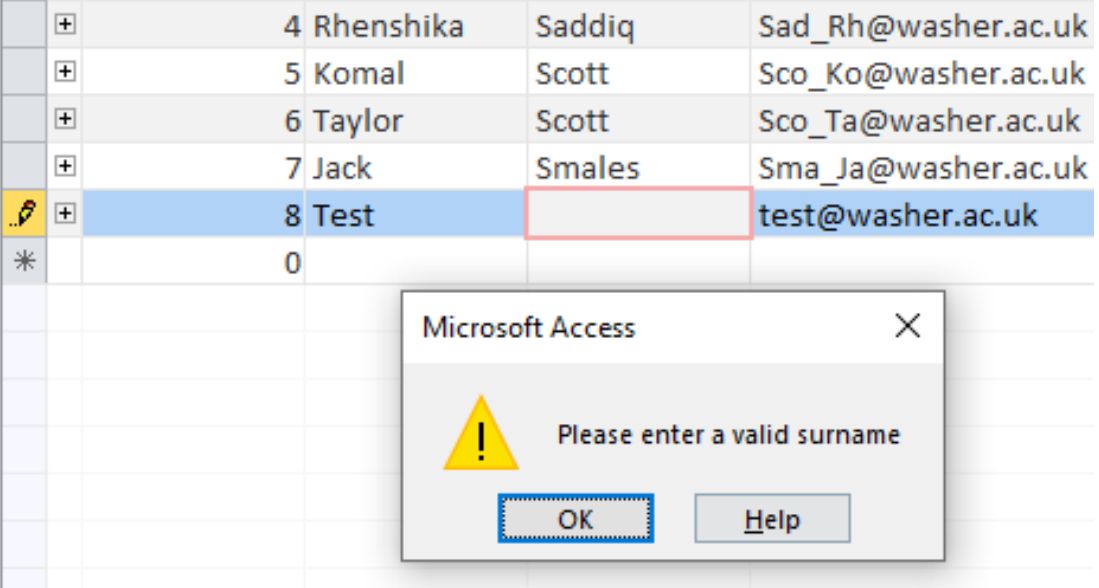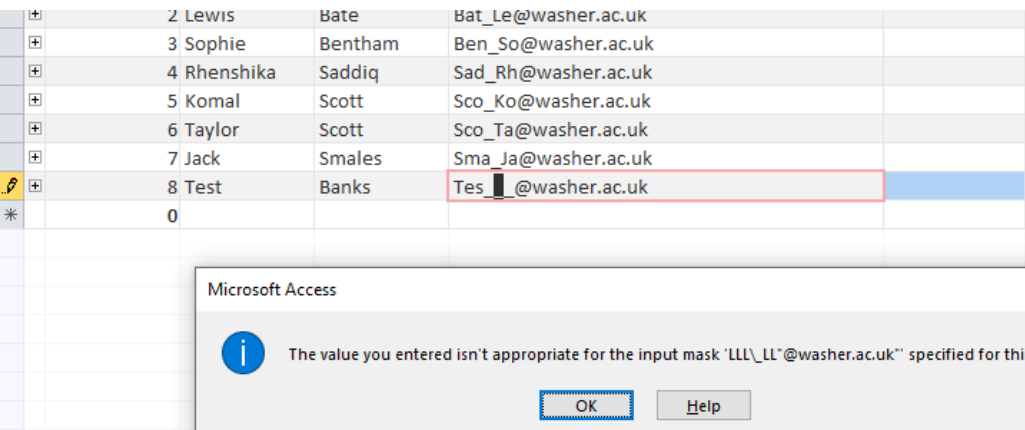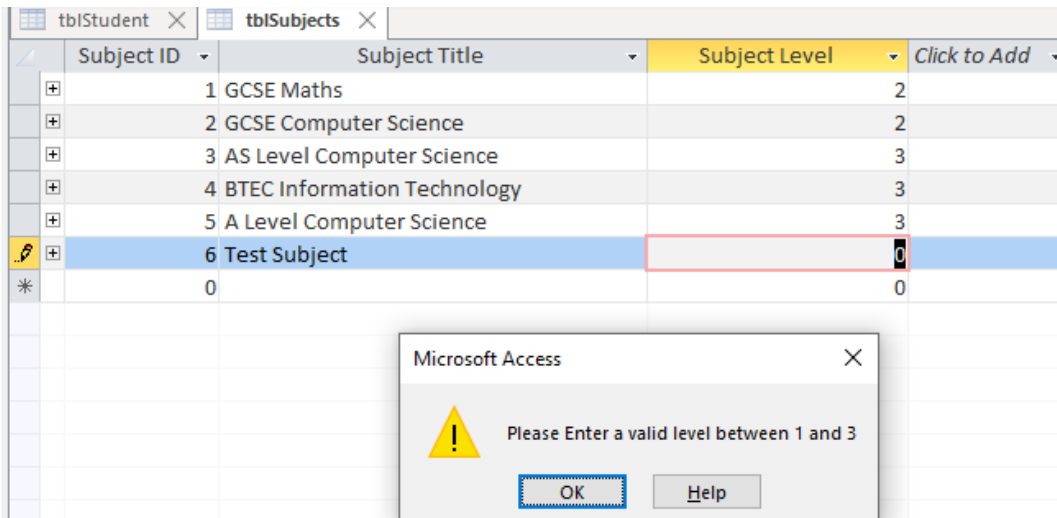
Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 3: Queries and Report	0	1-3	4-6	7-9	10-12	12
	No rewardable material	Queries and report include limited relevant fields. Queries and report include details of some criteria and calculations required, which may include inaccuracies. Presentation of data in queries and report will not aid readability and understanding of data.	Queries and report includes some relevant fields. Queries and report include accurate details of some criteria and calculations required. Presentation of data in queries and report will, in places, aid readability of and understanding of data.	Queries and report includes mostly relevant fields. Queries and report includes accurate details of most criteria and calculations required. Presentation of data in queries and report will mostly aid readability and understanding of data.	Queries and report includes all relevant fields only. Queries and report include accurate details of all criteria and calculations required. Presentation of data in queries and report will aid readability and understanding of data.	
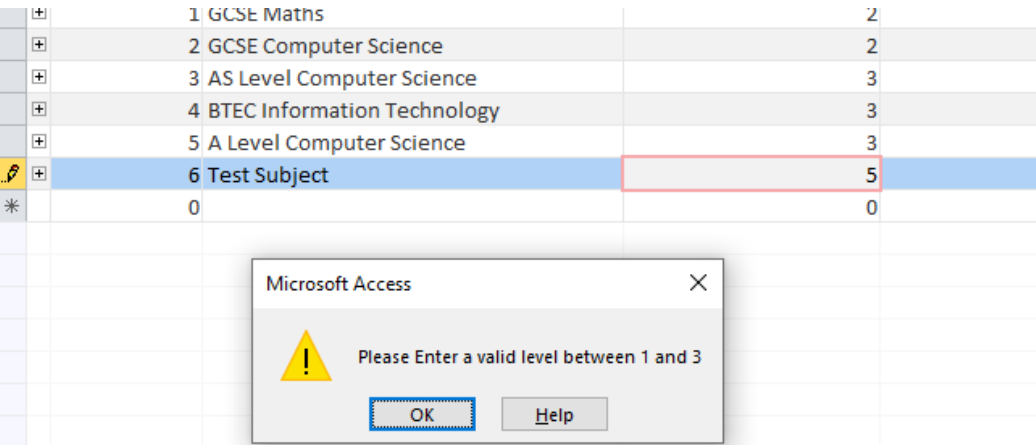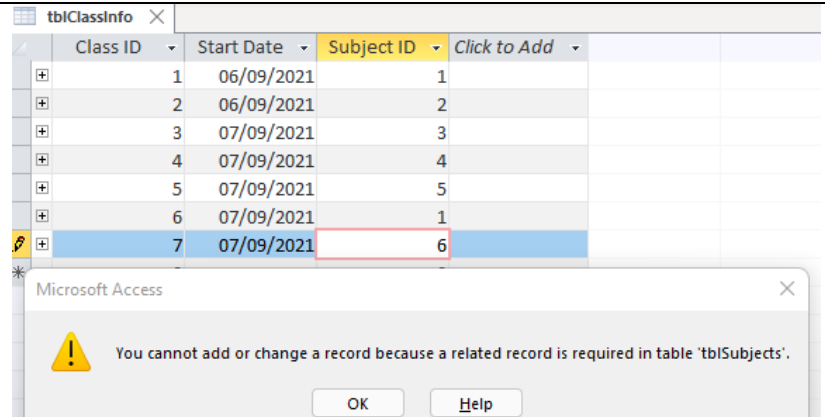
Trait	Band	Comments
1	4T	Query A achievement 3 points, query B achievement 3 points, report achievement 6 points. Overall, 12 points. 12 points is the top of mark band 4
2	4M	Query A achievement 3 points, query B achievement 5 points, report achievement 3 points. Overall, 11 points, 11 points is middle of mark band 4
3	4T	Query A achievement 3 points, query B achievement 4 points, report achievement 5 points. Overall, 12 points. 12 points is the top of mark band 4
Band	4	**Overall, the evidence is clearly mark band 4. There is just not quite enough evidence to award full marks due to the weakness in trait 2**
Mark	11	
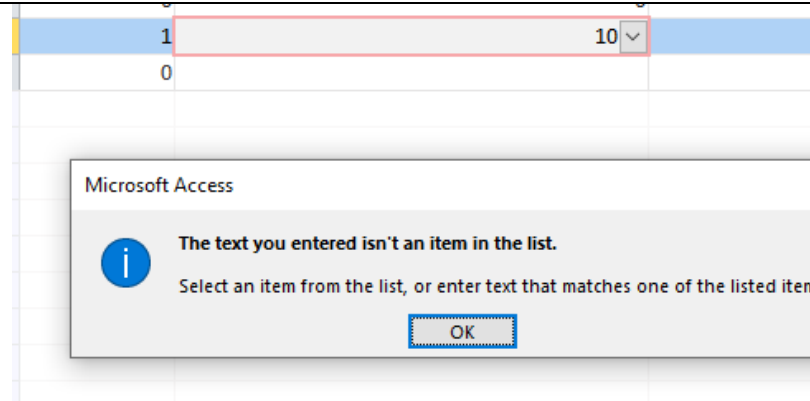
Activity 4 – Structure testing, Band 3, Marks 6

Input form to add a new subject

Test No	Test data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)
1	First name: Test Surname: Null Email: testwasher.ac.uk	Error Saying "Please enter a valid surname	

Data	Learner has included test data for all fields other than the ID field. It would have been better to give the test data to be used for the ID too. The test data for the email address is not what you would expect to see when the field being tested is the surname field i.e. it should be valid data. On the whole though the test data is not bad.
Expected	Clear to see exactly what they expect will happen/what the user will see
Actual	Can see all of the test data being used, it matches the given test data, and the actual results clearly match the expected results

Test No	Type / Test data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)
2	First name: Test Surname: Banks Email: Tes_@washer.ac.uk	Error Saying that inputted data does not match input mask.	

Data	Learner has included test data for all fields other than the ID field.
Expected	Clear to see exactly what they expect will happen/what the user will see
Actual	Can see all of the test data being used, it matches the given test data, and the actual results clearly match the expected results

Test No	Type / Test data	Expected results	
3	Subject Title: Test Subject Subject Level: 0	Error saying please enter a valid number between 1 and 3	

Data	Learner has included test data for all fields other than the ID field. It would have been good to see the test data for the ID field too.
Expected	Clear to see exactly what they expect will happen/what the user will see
Actual	Can see all of the test data being used, it matches the given test data, and the actual results clearly match the expected results

4	Subject Title: Test Subject Subject Level: 5	Error saying please enter a valid number between 1 and 3	

Data	Same slight weakness in terms of the test data for the ID being missing otherwise fine
Expected	Clear to see exactly what they expect will happen/what the user will see
Actual	Can see all of the test data being used, it matches the given test data, and the actual results clearly match the expected results

5	ClassID: 7 Start Date: 07/09/2021 SubjectID: 6	Error saying that a record cannot be added because a related record needs to be in the subject tale	

Data	Test data is good. Only the SubjectID should fail the test.
Expected	The expected results does Clear to see exactly what they expect will happen/what the user will see
Actual	Can see all of the test data being used, it matches the given test data, and the actual results clearly match the expected results

| 6 | Class ID: 1
Student ID: 10 | Error saying that text entered is not in list. | |

Data	Good test data for both fields i.e. only the field being tested has data that should not be accepted
Expected	Clear to see exactly what they expect will happen/what the user will see
Actual	Can see all of the test data being used, it matches the given test data, and the actual results clearly match the expected results

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max Marks
Activity 4: Structure Testing	**0**	**1-2**	**3-4**	**5-6**	**6**
	No rewardable material	Testing is too narrow to confirm a working interface, including limited normal, erroneous and/or extreme data. Expected results are generic or mostly inaccurate. Test data may not be present Test results prove that that the database operates under some normal circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a limited understanding of any errors that were found.	Testing is adequate to confirm a working solution, including some normal, erroneous and/or extreme data. Expected results are mostly accurate and based on identified test data but may lack detail. Test results prove that that the database operates under some normal circumstances and that the interface can cope with some erroneous and extreme data relevant to the scenario. Test result comments are present when errors have been found. These comments show partial understanding of any errors that were found.	Testing is thorough, including a range of normal, erroneous and extreme data. Expected results are specific and accurate based on identified test data. Test results prove that that the database operates under all circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a clear understanding of any errors and how they were fixed.	

Trait	Band	Comments
1	4	The testing is thorough. The learner has provided evidence for the six requested tests. NOTE this learner had included more testing than this i.e., two tests for each requirement. Examiners only look at the tests requested. Please stress to learners that the only testing that attracts marks is the testing given in the activity requirements
2		There was a slight weakness in that the test data for the ID field was missing at times and test data for the email address was weak in test 1. Overall, it was very good test data. Expected results were based on the test data
3		The test results proved that the database operates under all the circumstances given in the testing requirements. There were no errors found so it would not be expected to see comments for something that does not exist
Band	4	**There was no reason not to award Band 4 and 6 marks. The slight weaknesses in the test data did not justify moving it to 5 marks or lower**
Mark	6	

Activity 5 - Evaluation, Band 3, Marks 6

When I read the scenario, I thought there were 3 tables student, subject and class. I looked at the extract and could see that these tables were needed because there was information about students, classes and subjects. The scenario said students are enrolled into classes, a class is for a subject and a subject may be taught in more than one class. So even from the scenario I could clearly see a one to many relationship between the subject and class. It was harder to work out the relationship between the student and class because a student can do more than one class as this was shown in the extract and a class can have more than one student in it this was also shown in the extract. This means it is many to many relationship. Reading the scenario again I could see it said students are enrolled into classes. So this made me think a table for class enrolment info. 4 tables. 1 for students, 1 for subjects, 1 for classes and 1 for class info for enrolments. The primary keys for student, class and subject were easy ID fields. I realised the link table for the students and their classes needed two fields to be unique Class ID and Student ID. So I put them in there and they were foreign keys and a primary key in there. I made sure the subject could be taught in more than one class without duplicating by putting the Subject ID in the class table. I am very happy with my database structure. There is no duplication at all other than what should be allowed – the keys. I built it and I checked. The only duplication in there was in the foreign keys so I think it minimised data duplication very, very well. M normalisation was right.

I did well with validating the email address the only thing I could not remember was capital letter and lowercase letters but I think it was close enough to prevent a lot of mistakes. So it has to be the format but may have upper or lowercase anywhere which is not so good. I perfectly did the requirement for the subject level it can only be 1, 2 or 3 because I used a validation rule to make sure. I also did a presence check on it to make sure there had to be 1 there. I met the requirements properly for this one so it was good.

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max. mark
Activity 5: Structure Evaluation	0	1-2	3-4	5-6	6
	No rewardable material	Superficial understanding of relevant technical concepts shown with some inaccuracies. Limited or unsupported justification of the relational database structure selected. Limited links between aspects of the solution and the requirements of the scenario. Technical vocabulary is used but it is not used appropriately to support arguments.	Some accurate and relevant understanding of technical concepts shown. Some valid justification, which may lack support of the relational database structure selected. Some logical links between aspects of the solution and the requirements of the scenario but may lack clarity. Mostly accurate technical vocabulary is used to support arguments.	Accurate and detailed understanding of relevant technical concepts shown throughout. A valid and fully supported justification of the relational database structure selected. Makes logical coherent links between aspects of the solution and the requirements of the scenario throughout. Fluent and accurate technical vocabulary is used to support arguments.	

Trait	Band	Comments
1	4	Reading the evaluation, it is clear to see the learner is talking about **their** own solution. The thought process behind the decisions made can be seen and it demonstrates accurate and detailed understanding. There is a valid and fully supported justification of the structure they used. It is related to the scenario/extract throughout, which is good. There is no reason not to award full marks for this evaluation.
2		
3		
4		
Band	4	The part A evaluation should not consider the user it is purely a showcase for the learners understanding of relational database concepts
Mark	6	and how they have applied them to their solution.

Activity 6 – Interface and Functionality, Band 4, Marks 12

Subject form

Trait 1 this is all about how the form looks, how easy they would be to use and how relevant they are to the scenario and task. The purpose of the first one was to add a subject.

Looking at the form from a user's perspective the form is to add a new subject. The title ensures this is known straight away. The learner has included instructions on how to use the form, mentioning the valid range for the subject level, which is good. They are asterisks to show where data entry is required, the Subject ID has been disabled as it is automatically generated and there is a combo box to allow the user to easily select the faculty. The labels are good, easily readable because there are spaces between the words. The only weakness present is the lack of consideration of the data that will be input/displayed in the fields i.e., the subject title is not wide enough – there was at least one long subject title in the database, and the subject level is too wide for a single digit.

Trait 2 this is all about the criteria/calculations required to meet requirements. In terms of the first form the only 'calculation' as such is the generation of the SubjectID. This was an AutoNumber field so the learner only needed to include the field on the form so that New or equivalent could be seen. This learner has done that.

Trait 3 this is all about validation and automation. The first form is the only form that needs to be validated.

The requirements were:

1. The form should be ready for data entry.
2. The subject title must be present.
3. The level must be within the specified range.
4. Valid data should be appended to the subject table and a save message should appear.
5. A suitable error message should appear where invalid data has been used.

1. The form should be ready for data entry

The evidence for this is found on page 20 i.e., the form is blank. This is enough to say this requirement has been met. This learner has also provided a screenprint showing that the form will open in data entry mode.

3. The level must be within the specified range

The learner has chosen to add a validation rule and error message to the properties of the field for this requirement. This is fine for a range check but **MUST NOT** be used for a presence check. The learner had also used a value lookup for this and had set limit to list to yes so either method was fine.

```
partB_database - Form_frmNewSubject (Code)

eneral)

 Option Compare Database|

'--------------------------------------------------------
' addRecord_Click
'
'--------------------------------------------------------
Private Sub addRecord_Click()

    If (IsNull(SubjectTitle)) Then
        MsgBox ("Please enter a valid subject title")
    ElseIf (SubjectLevel = 0) Then

        MsgBox ("Please enter a subject level")
    ElseIf (FacultyID = 0) Then
        MsgBox ("Please select a valid faculty")
    Else
        DoCmd.GoToRecord , "", acNewRec
        MsgBox ("New Subject Saved!")
    End If
```

2. The subject title must be present

   The learner is checking to make sure the subject title is present using IsNull

4. Valid data should be appended to the subject table and a save message should appear
   The learner is forcing the save by moving to a new record and is displaying a save message
   The save would only take place if the data were valid i.e., subject title present and subject level between 1 and 3

5. A suitable error message should appear where invalid data has been
   Suitable error messages have been used throughout.

The learner has included validation that was not requested. This is fine, however if extra validation is added it must work correctly to allow **only** a valid record to be saved. It is better to concentrate on the validation specified rather than add extra. The time should be used elsewhere. Trait 1 should show all fields that should have input (asterisks), but they only need to implement what has been requested.

Validation and automation are good for this form.

Test results form

The purpose of this form was to be able to select a subject for the most recent test week, see the maximum mark available for that test, input the number of students who sat the test, input the highest and the lowest marks achieved, see the highest and lowest marks represented as percentages. Validation is not expected for the second form nor is the save process. That skills for that have already been tested in the first form.

Calculate Test Scores

Please select a subject from the combo box. After please fill in the required fields which includes number of students, highest mark and lowest mark once this is completed press Calculate Scores to calculate the highest and lowest percentages.

Test Week	10/01/2022
Subject	[dropdown] *

Highest Possible Mark

Amount of Students	[ ]	*
Highest Mark	[ ]	*
Lowest Mark	[ ]	*

Calculate Scores

Highest Mark %	[ ]
Lowest Mark %	[ ]

Form layout (design view):

Test Week	TestWeek
Subject	Unbound
Highest Possible Mark	=[subjectTitleCombo].[Column](1)
Amount of Students	Unbound
Highest Mark	Unbound
Lowest Mark	Unbound

Calculate Scores

Highest Mark %	Unbound
Lowest Mark %	Unbound

Form

Format	Data	Event	Other	All

Record Source	qryForm
Recordset Type	Dynaset
Fetch Defaults	Yes

```
Option Compare Database

Private Sub Command18_Click()

    HighestPercent = (HighestMark / higestPossibleMark)
    lowestPercent = (LowestMark / higestPossibleMark)
End Sub
```

subjectTitleCombo

Format	Data	Event	Other	All

Control Source	
Row Source	SELECT [qryForm].[SubjectTitle], [qryForm].[MaximumMark] FROM qryForm;
Row Source Type	Table/Query
Bound Column	1
Limit To List	No

---

qryForm

*
TestResultID
TestWeek
NumStudentsPresen
SubjectTitle
MaximumMark

Field:	SubjectTitle	MaximumMark
Table:	qryForm	qryForm
Sort:		
Show:	☑	☑
Criteria:		

Field:	TestResultID	TestWeek	NumStudentsPresent	SubjectTitle	MaximumMark
Table:	tblTestResult	tblTestResult	tblTestResult	tblSubject	tblTest
Sort:					
Show:	☑	☑	☑	☑	☑
Criteria:			Is Null		
or:					

These were the requirements.

1. When the form opens the date of the latest test week must display automatically in a field.
2. There must be a combo box for the subject. This must contain only the subjects that have a test in the test week displayed on the form.
3. Once the user has selected a subject the form must display the maximum mark for that subject's test in a field.
4. The user must then be able to input into fields:
   - the number of students who took the test
   - the highest mark achieved
   - the lowest mark achieved.
5. These details should then be calculated and displayed in fields:
   - the highest mark as a percentage
   - the lowest mark as a percentage.

1. When the form opens the date of the latest test week must display automatically in a field.
   The learner chose to use a query to do this, and this became the record source for the form. The user used Is Null as their method of finding the latest test week. This was not entirely appropriate i.e., there could possibly be other tests without students present but was a good effort.

		Form	⌄
Format	**Data**	**Event**	**Other**	**All**

Record Source	qryForm
Recordset Type	Dynaset
Fetch Defaults	Yes

Field:	TestResultID ⌄	TestWeek	NumStudentsPresent	SubjectTitle	MaximumMark
Table:	tblTestResult	tblTestResult	tblTestResult	tblSubject	tblTest
Sort:					
Show:	☑	☑	☑	☑	☑
Criteria:			Is Null		
or:					

2. There must be a combo box for the subject. This must contain only the subjects that have a test in the test week displayed on the form.
   The learner included a combo box and provided a screenprint of the source of the combo box

	subjectTitleCombo ⌄
Format	**Data**	Event	Other	All

Control Source	
Row Source	SELECT [qryForm].[SubjectTitle], [qryForm].[MaximumMark] FROM qryForm;
Row Source Type	Table/Query
Bound Column	1
Limit To List	No

3. Once the user has selected a subject the form must display the maximum mark for that subject's test in a field.
   The learner chose to link the maximum mark for that subject's test to the MaximumMark column in the query.
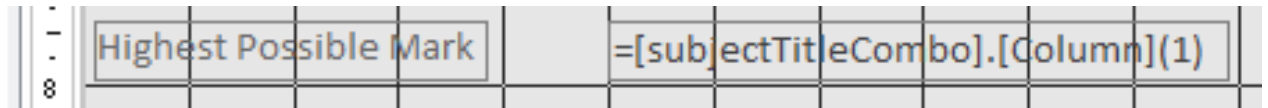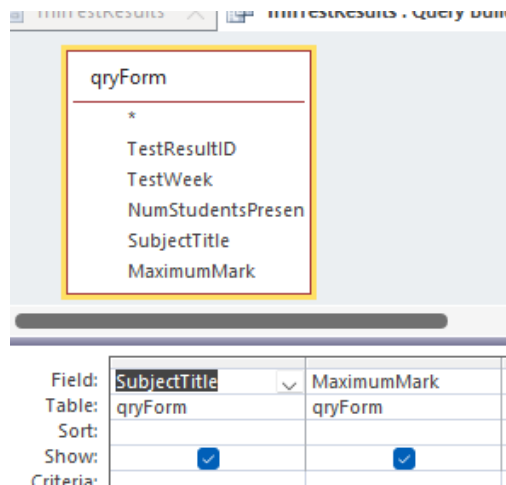
5. These details should then be calculated and displayed in fields:
   a. the highest mark as a percentage
   b. the lowest mark as a percentage.

   The learner used VBA code to do this at the expense of it updating automatically i.e., must click a button for it to occur.

```
Private Sub Command18_Click()

HighestPercent = (HighestMark / higestPossibleMark)
lowestPercent = (LowestMark / higestPossibleMark)
End Sub
```

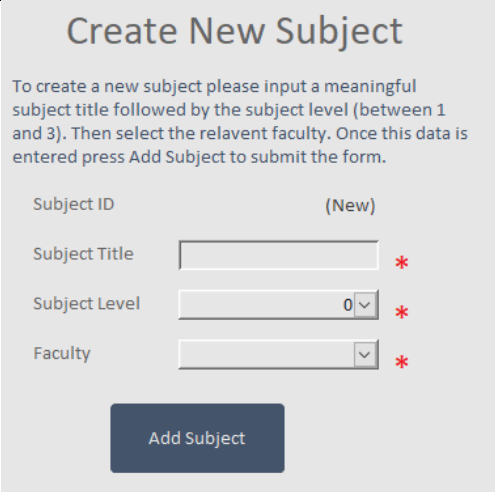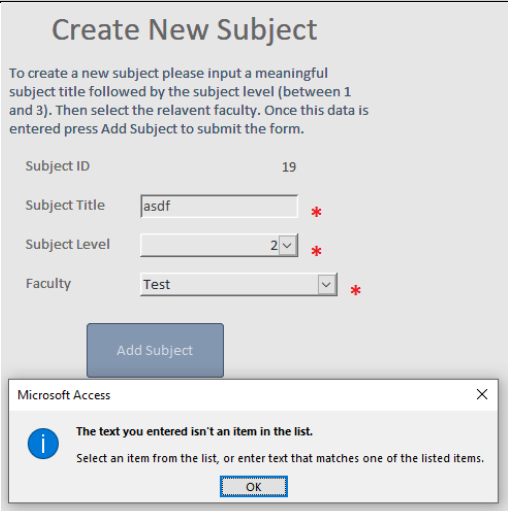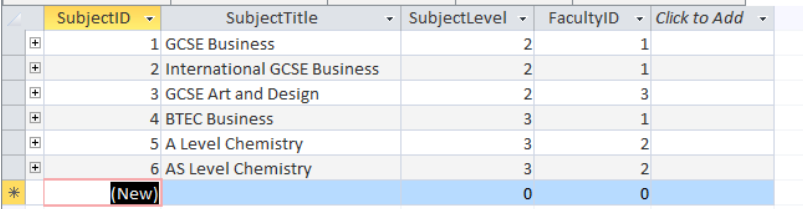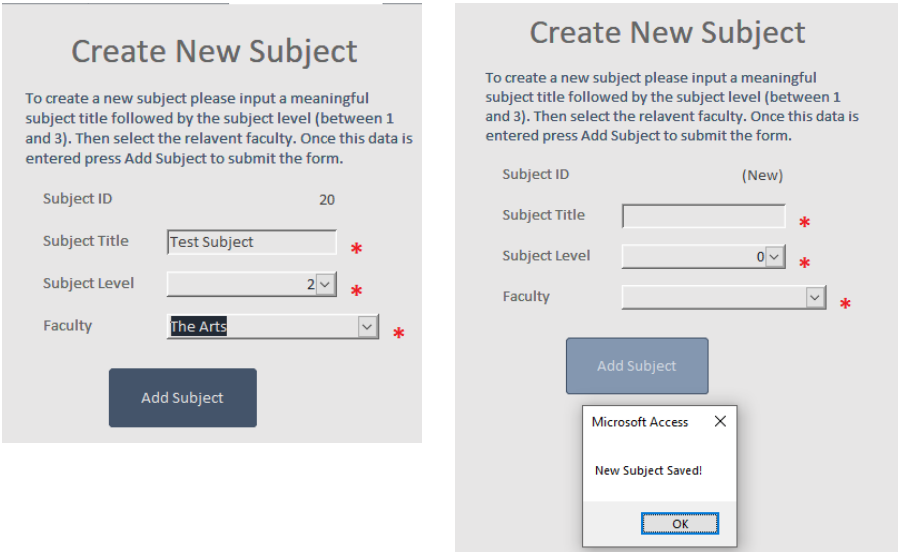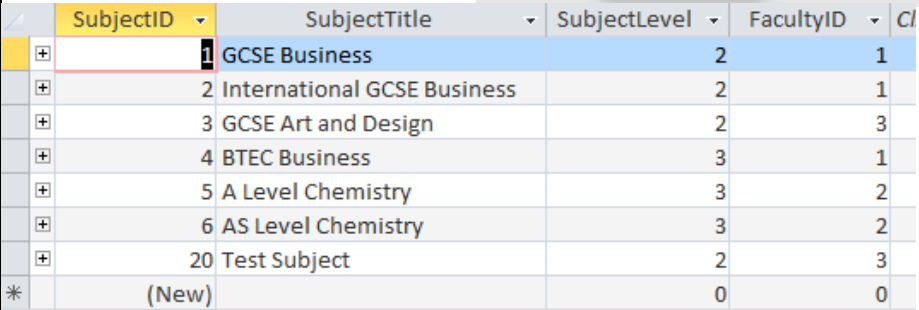| Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 6: **Interface and Functionality**	0	1-4	5-7	8-10	11-14	14
	No rewardable material	Interface is unclear or provides limited information and there are inconsistencies and inaccuracies in formatting, so a user would experience difficulty in using the database and making maintenance by a third party difficult	Interface is clear but there are some inconsistencies and inaccuracies in formatting allowing a user to use the database with minor difficulties and allowing maintenance by a third party with minor difficulties.	Interface is clear with minimal inconsistencies and inaccuracies in formatting allowing a user to use the database easily and allowing maintenance by a third party with minor difficulties.	Interface is clear and intuitive, consistently and accurately formatted allowing a user to easily use the database and allowing it to be easily maintained by a third party.	
		Interface may not have details of criteria/calculations required, or these may include inaccuracies.	Interface includes accurate details of some criteria/calculations required.	Interface includes accurate details of most criteria/calculations required.	Interface includes accurate details of all criteria/calculations required.	
		Interface uses minimal validation, checking procedures and automation resulting in a system with limited capacity to reduce errors or handle unexpected events.	Interface uses some accurate validation, checking procedures and automation, resulting in a system that minimises the most common errors and handles some unexpected events.	Interface uses accurate validation, checking procedures and automation, resulting in a system that minimises the majority of errors and handles most unexpected events.	Interface uses accurate validation, checking procedures and automation throughout, resulting in a robust system that minimises errors and handles unexpected events.	
		Interface may not be fully functional and/or may have major errors that prevent the interface from meeting the given criteria.	Interface is functional and meets some of the given criteria with minimal errors.	Interface is functional with minimal errors and meets the given criteria.	Interface is fully functional and fully meets the given criteria.	

Trait	Band	Comments
1	4B	In terms of the interface a good attempt has been made at both forms but there are weaknesses in terms of field widths. In the first form there is only 1 field that is an appropriate width the second form has various widths for fields that essentially hold the same data i.e., digits
2	4T	The evidence is strong for trait 2. It can be seen that the StudentID would increment. The learner has found the latest test week, filtered to only the subjects that have a test in that week and retrieved the maximum mark for the selected test
3	4M	The evidence is not quite a strong as trait 2 but a very good attempt has been made. The highest mark and lowest marks are generated as percentages, the latest test week, maximum mark for the selected subject and the two percentages are displayed. There is no evidence that the maximum mark would refresh when another subject was selected and slight weakness in that the user would have to click a button to generate/refresh the percentages.
4	4M	Based on the other three traits mid band 4 is the most appropriate for this trait.
Band	4M	With the weaknesses in traits 1 and 3 there is not enough evidence to award full marks. The evidence is clearly mark band 4 and it is
Mark	12	stronger than the evidence we would expect to see at the bottom of the mark band.

Activity 7 – Interface testing, Band 3, Marks 6

Test No	Test data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)
1	New Form Opened	New blank form is open with id saying (new) and all fields are blank ready for data to be inputted	**Create New Subject** To create a new subject please input a meaningful subject title followed by the subject level (between 1 and 3). Then select the relavent faculty. Once this data is entered press Add Subject to submit the form. Subject ID (New) Subject Title [ ] * Subject Level [0 ▾] * Faculty [▾] * Add Subject

Data	The test data is fine.
Expected	Expected results are good.
Actual	Actual results match expected results

Test No	Type Test data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)
2	Title: asdf Subject Level: 2 Faculty: test	Error saying text entered is not in list.	 Create New Subject To create a new subject please input a meaningful subject title followed by the subject level (between 1 and 3). Then select the relavent faculty. Once this data is entered press Add Subject to submit the form. Subject ID 19 Subject Title asdf * Subject Level 2 * Faculty Test * Add Subject Microsoft Access X The text you entered isn't an item in the list. Select an item from the list, or enter text that matches one of the listed items. OK

Data	Subject level is the only field that will cause an error, which matches the test, the rest of the test data is valid. This is good. However, the ID should have been specified too even if just to say next AutoNumber
Expected	Expected results are good for their solution. It is what they expect to happen
Actual	The actual results match the expected results, and the test data matches.

Test No	Type Test data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)
3	Name: Test Subject Level: 2 Faculty: The Arts	Record Should save	

Data	Only Subject ID has not been given (even if it had said next AutoNumber of next generated number). The rest of the test data is good.
Expected	Expected results should have been more detailed i.e. what table, no mention of the save message, no mention of the form clearing.
Actual	Actual results are very good and are what makes the weakness in the expected results less of a problem in terms of marks

4	New Form Opened	Form Should be showing latest test date 10/01/2022	 **Calculate Test Scores** Please select a subject from the combo box. After please fill in the required fields which includes number of students, highest mark and lowest mark once this is completed press Calculate Scores to calculate the highest and lowest percentages. Test Week 10/01/2022
Data		Test data is fine	
Expected		Expected results are good – identifying what should be there	
Actual		Actual results match the expected results	
5	Subject: BTEC Business	Highest Possible Mark: 96	Please select a subject from the combo box. After please fill in the required fields which includes number of students, highest mark and lowest mark once this is completed press Calculate Scores to calculate the highest and lowest percentages. Test Week 10/01/2022 Subject BTEC Business * Highest Possible Mark 96
Data		Test data is fine though could also have specified the test week	
Expected		Expected results are good	
Actual		Actual results match the expected results	

| 6 | Subject: BTEC Business
Amount of Students: 20
Highest Mark: 87
Lowest Mark: 42 | Highest Mark % 90.63%
Lowest Mark % 43.75% | Calculate Test Scores

Please select a subject from the combo box. After please fill in th__
required fields which includes number of students, highest mark
and lowest mark once this is completed press Calculate Scores to
calculate the highest and lowest percentages.

Test Week   10/01/2022

Subject   BTEC Business ∨ *

Highest Possible Mark   96

Amount of Students   20   *

Highest Mark   87   *

Lowest Mark   42   *

Calculate Scores

Highest Mark %   90.63%

Lowest Mark %   43.75% |

Data	Test data good but, again, should have included test week
Expected	Expected results are good
Actual	Actual results match test data and expected results

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max Marks
Activity 7: Interface Testing	**0**	**1-2**	**3-4**	**5-6**	**6**
	No rewardable material	Testing is too narrow to confirm a working interface, including limited normal, erroneous and/or extreme data. Expected results are generic or mostly inaccurate. Test data may not be present

Test results prove that that the database operates under some normal circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a limited understanding of any errors that were found. | Testing is adequate to confirm a working solution, including some normal, erroneous and/or extreme data.

Expected results are mostly accurate and based on identified test data but may lack detail.

Test results prove that that the database operates under some normal circumstances and that the interface can cope with some erroneous and extreme data relevant to the scenario. Test result comments are present when errors have been found. These comments show partial understanding of any errors that were found. | Testing is thorough, including a range of normal, erroneous and extreme data.

Expected results are specific and accurate based on identified test data.

Test results prove that that the database operates under all circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a clear understanding of any errors and how they were fixed. | |

Trait	Band	Comments
1	4	The testing is thorough. The learner has provided evidence for the six requested tests
2		There were one or two weaknesses with the test data e.g., ID being missing, could have included the test week but not enough to detract from the quality of the evidence
3		The test results proved that the database operates under all the circumstances given in the testing requirements. There were no errors found so it would not be expected to see comments for something that does not exist
Band	4	**There was no reason not to award Band 4 and 6 marks. The slight weaknesses in the test data did not justify moving it to 5 marks or lower**
Mark	6	

Activity 8 – Interface evaluation, Band 2, Marks 4

For the first form the first thing I was required to do was to ensure that the form was ready for data input and would not be overwriting existing data. I achieved this by making sure that the Data Entry field was set to Yes. Additionally, I added an element on the form that would display (New) when the form was open this was to ensure that the user was aware that the form was indeed ready for data entry. Another requirement of this form was to limit what number is inputted into the subject level field. I achieved this by adding validation to check for this. I also made the field a combo box to make it easier for the user to select accepted fields without having to use trial and error in the event they don't know what the parameters are. Finally, I ensured that only existing faculty could be selected by once again creating a combo box allowing the user to select faculty without having to look them up or guess. There is validation on this form to ensure that all required fields are met before the record is saved in the table. Including ensuring that all combo boxes are not set to their default value (0) and that all text fields are not null. If the form passes all the checks then the form is saved.

For the second form I had to create a way that the user could select a subject in the latest date range and enter data like; number of students, highest mark and lowest mark. The first requirement was to make the date appear when the form is opened, I achieved this by using a query to look for all test results where the data is blank and then send the date to the form. I then linked a combo box to said query to grab data and allow the user to select it. Once the user selects all other relevant info is displayed on the page. The requirements say that the user must be able to enter two fields highest mark and lowest mark. I achieved this by creating two input fields where they were able to enter this data. Once the data was entered the user presses a button and the fields highest % and lowest % are calculated and displayed on the page. The requirements said that no automated routine to save the data was required so the data does not update the table.

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max. mark
Activity 8: Interface Evaluation	0	1-2	3-4	5-6	6
	No rewardable material	Superficial understanding of relevant technical concepts shown with some inaccuracies. Limited or unsupported justification of the quality, performance and usability of the interface. Limited links between aspects of the solution and the requirements of the scenario. Technical vocabulary is used but it is not used appropriately to support arguments.	Some accurate and relevant understanding of technical concepts shown. Some valid justification, which may lack support of the quality, performance and usability of the interface. Some logical links between aspects of the solution and the requirements of the scenario but may lack clarity. Mostly accurate technical vocabulary is used to support arguments.	Accurate and detailed understanding of relevant technical concepts shown throughout. A valid and fully supported justification of the quality, performance and usability of the interface. Makes logical coherent links between aspects of the solution and the requirements of the scenario throughout. Fluent and accurate technical vocabulary is used to support arguments.	

Trait	Band	Comments
1	2	Reading the evaluation, it is clear to see the learner is talking about **their** own solution. The evaluation of the subject form is better in terms of thinking about what their solution means to the user. For example, "*user was aware the form was indeed ready for data entry*", "*easier for the user to select accepted fields without having to use trial and error*, "*without having to look them up or guess*".
2		
3		
4		The evaluation of the second form is a description of what was done there is no consideration of what it means for the user so a missed
Band	2	opportunity for higher marks.
Mark	4	